

FIG. 1

Surfactant effect on Gencal 7463 particle size in 20% NaCl/1 lb/bbl NEW-DRILL® PLUS/
 1 lb/bbl XAN-PLEX™ D / 0.5 lb/bbl sodium gluconate/3 lb/bbl NaAlO₂/ 5% by vol Gencal 7463

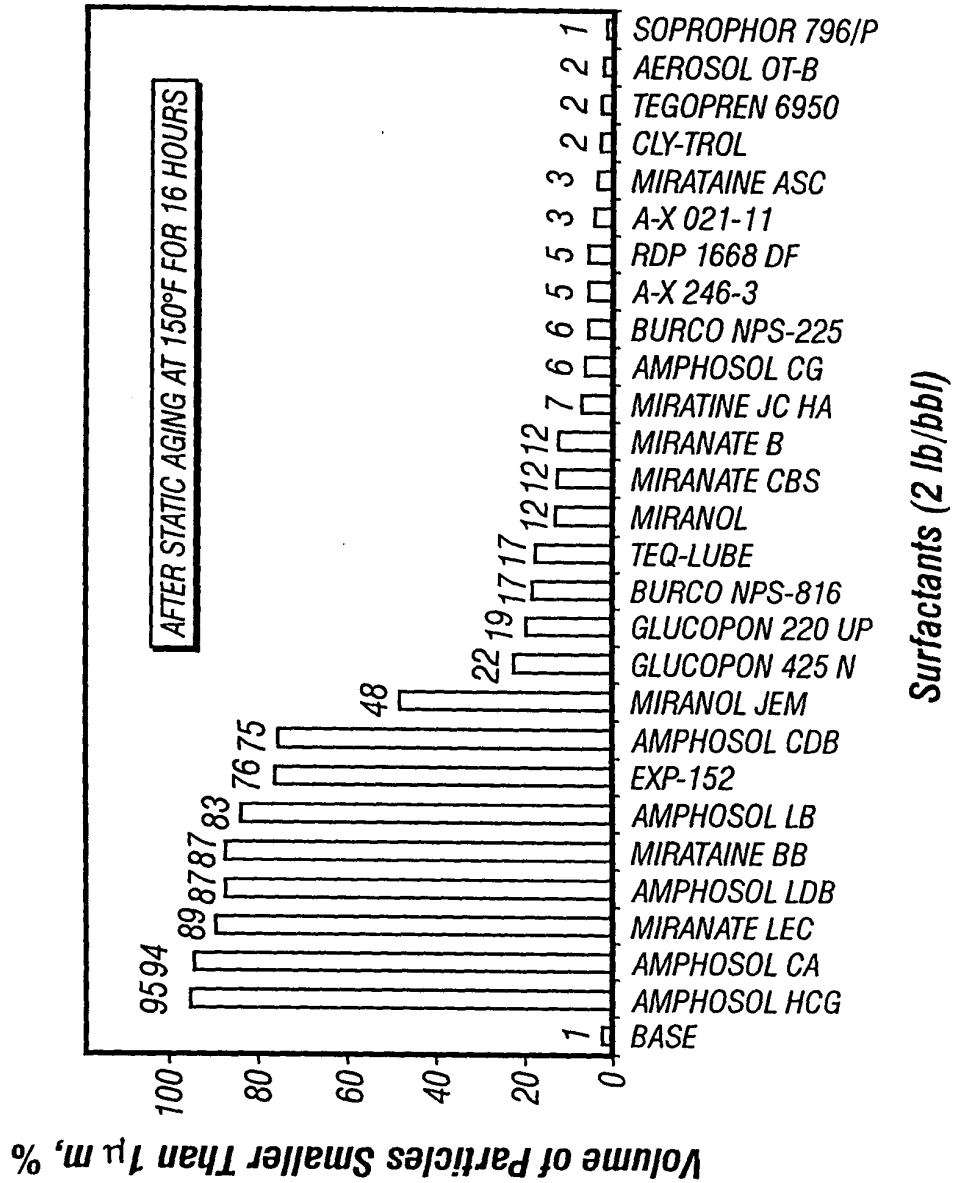


FIG. 2

Influence of polymer resins (3 lb/bbl) on Gencal 7463 particle size distributions after 16 hours, 150°F hot roll in 20% NaCl / 0.75 lb/bbl XAN-PLEX® D / 0.5 lb/bbl sodium d-gluconate / 0.4 lb/bbl NEW-DRILL® PLUS/2 lb/bbl BIO-PAQ® / 3 lb/bbl NaAlO₂ / 3% Gencal 7468 / 1 lb/bbl EXP-152

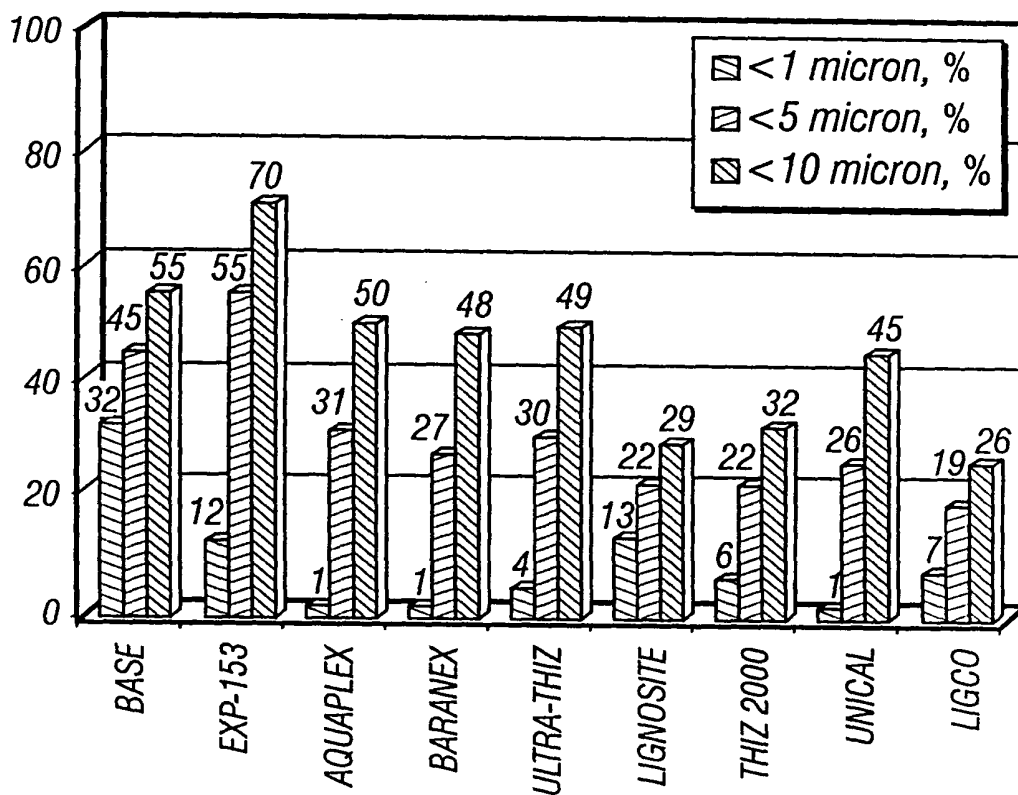


FIG. 3

EXP-154 versus ALPLEX® in 12 lb/gal mud. Base: 20% NaCl / 0.5 lb/bbl XAN-PLEX® D / 2 lb/bbl BIO-LOSE® / 1 lb/bbl NEW-DRILL® PLUS / 3% EXP-155 / 150 lb/bbl MIL-BAR® / 27 lb/bbl Rev Dust

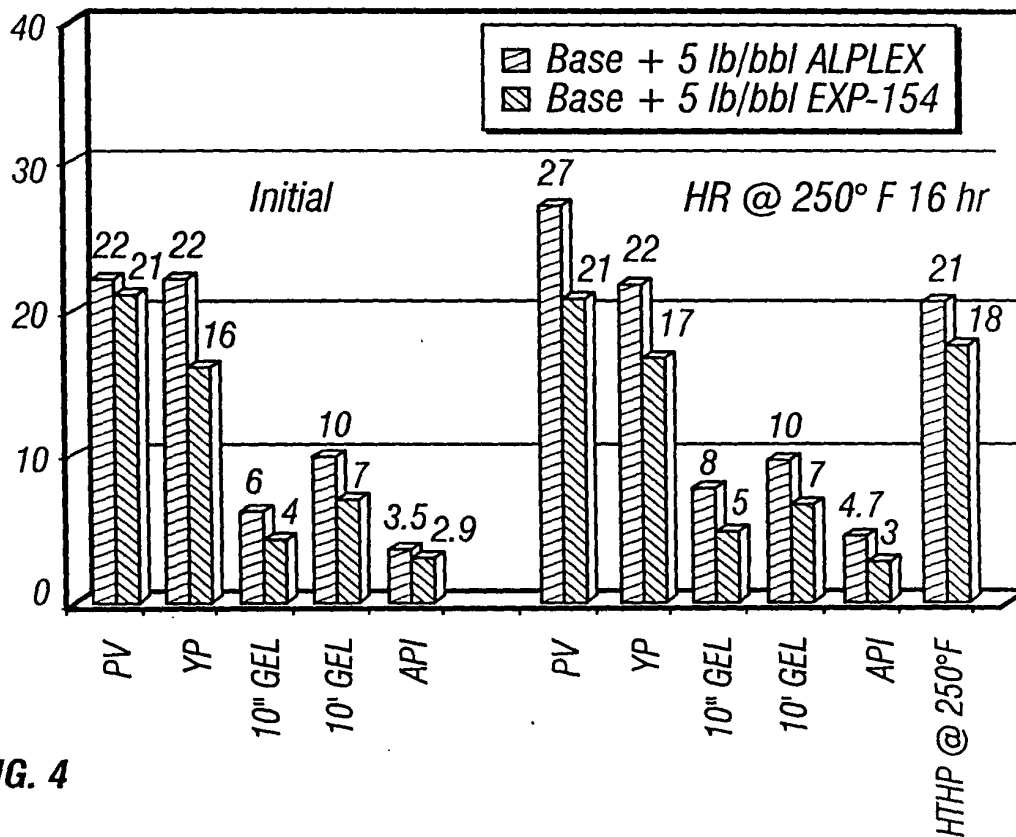


FIG. 4

PPT test results for ALPLEX®, EXP-154/EXP-155, and ISO-TEQ® fluids

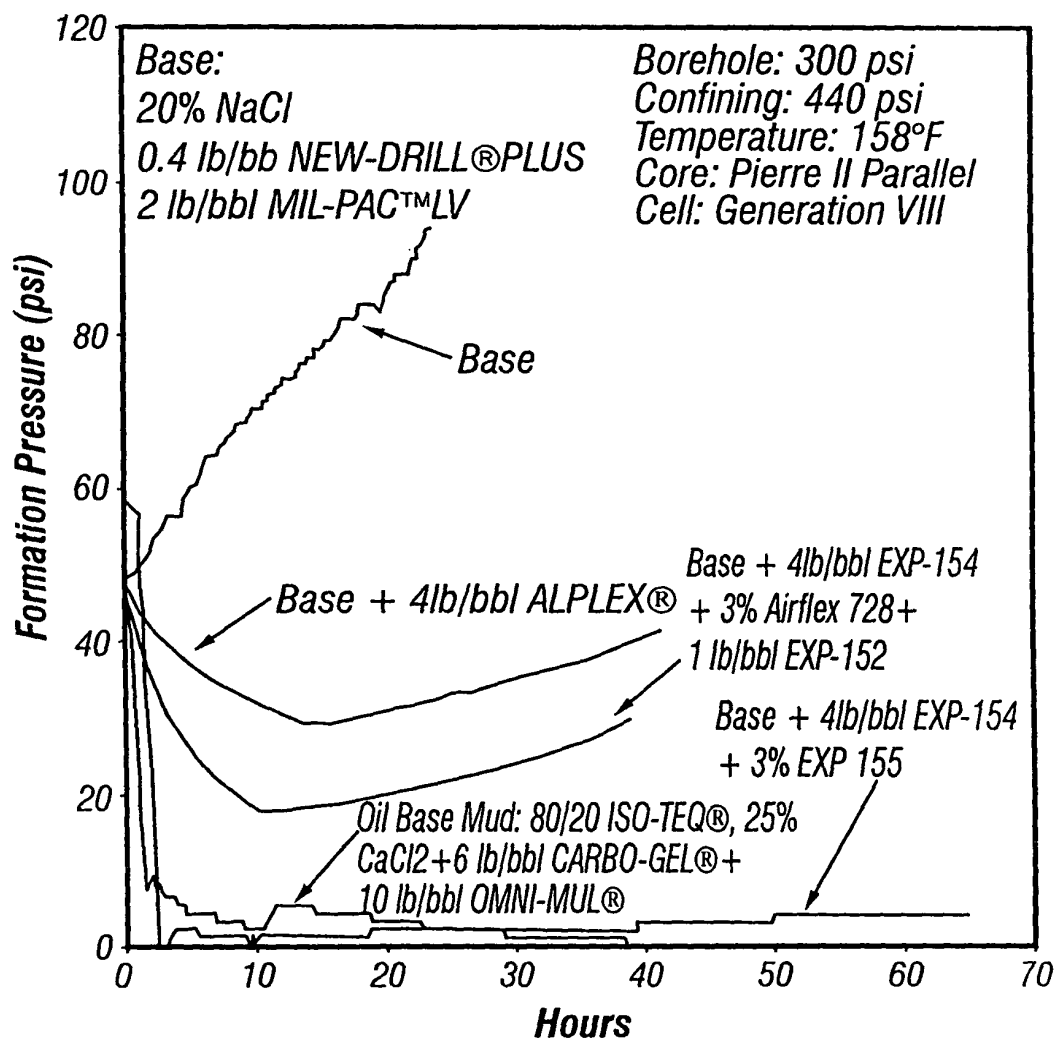
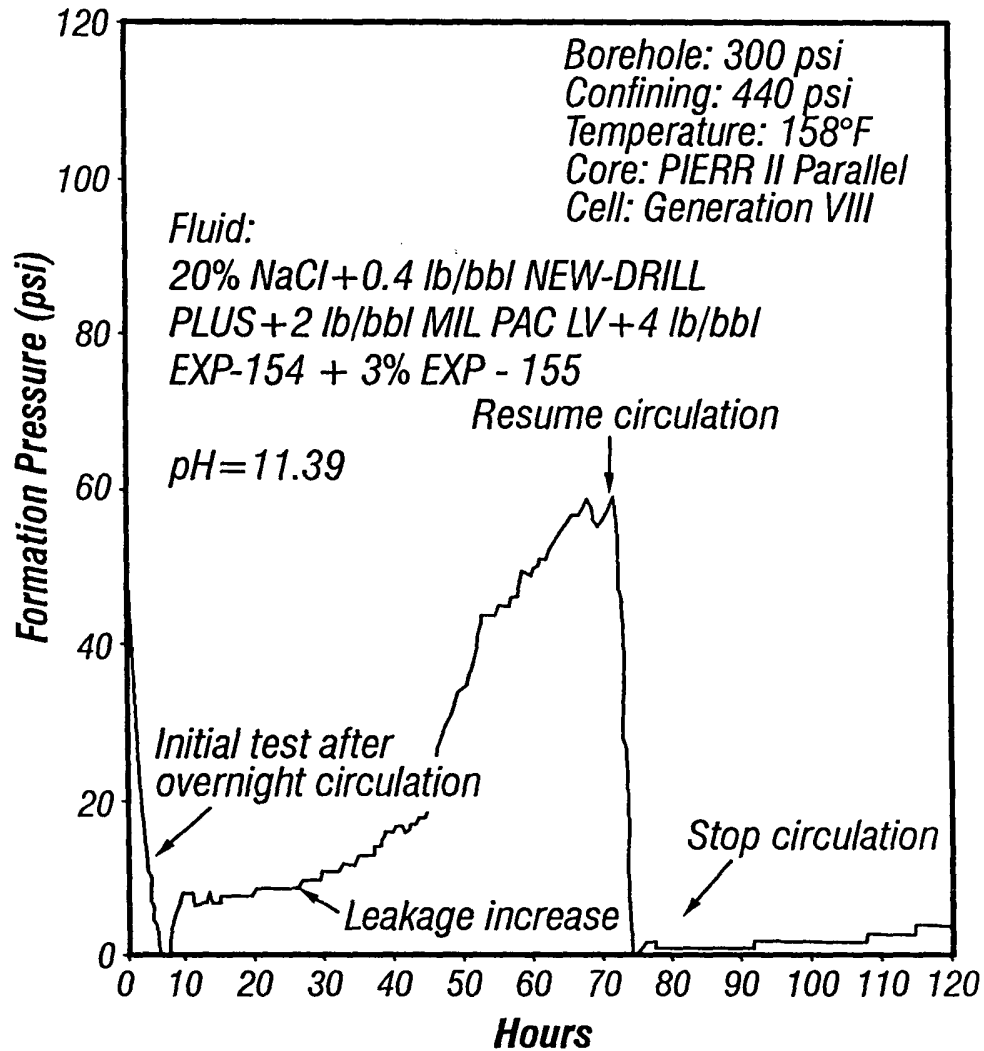


FIG. 5

Effects of circulation on EXP-154/EXP-155 PPT mud performance



Effects of latex on mud properties in 9.6 lb/gal 20% NaCl fluid after 16 hour, 250°F hot roll. Base: 20% NaCl / 1 lb/bbl XAN-PLEX® D/ 0.4 lb/bbl NEW-DRILL® PLUS / 2 lb/bbl BIO-PAQ® / 5 lb/bbl EXP-154 / 10 lb/bbl MIL-CARB® / 27 lb/bbl Rev Dust

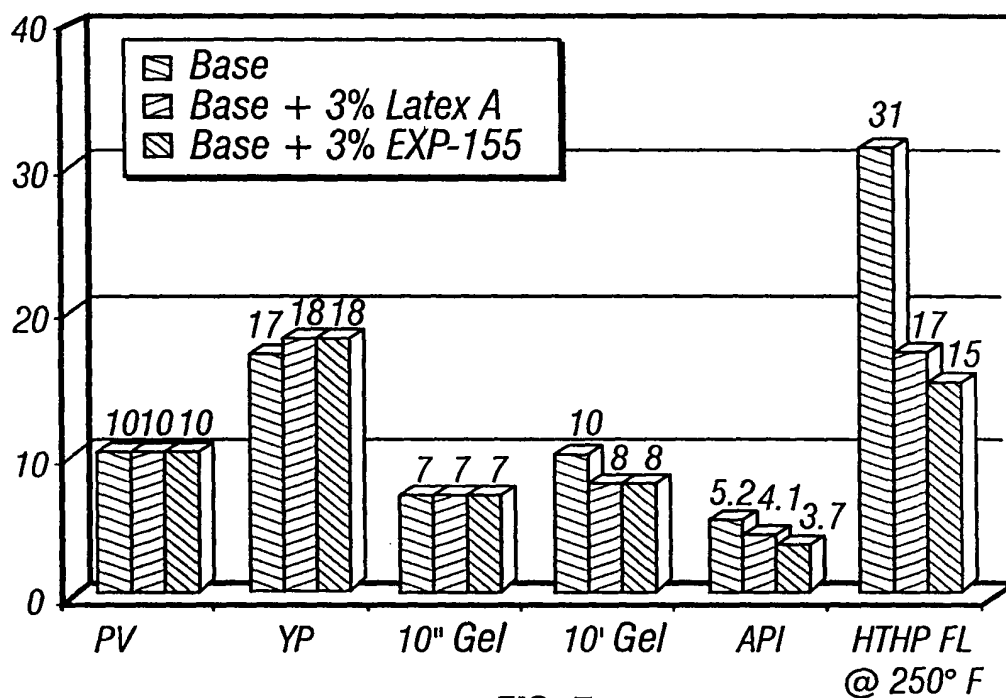


FIG. 7

Effects of latex on mud properties in 12 lb/gal fluid after hot rolling for 16 hours, at 250°F. Base: 20% NaCl / 0.75 lb/bbl XAN-PLEX® D/ 0.4 lb/bbl NEW-DRILL® PLUS / 3 lb/bbl BIO-PAQ®/ 5 lb/bbl EXP-154 / 150 lb/bbl MIL-BAR® /27 lb/bbl Rev Dust

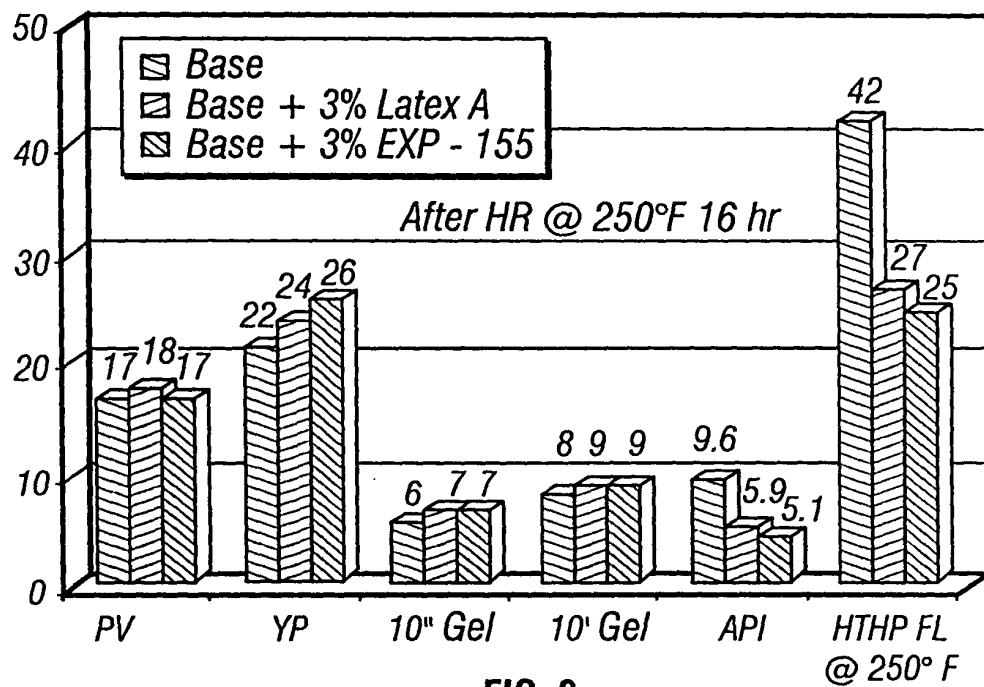


FIG. 8

96 hour *Mysidopsis bahia* range finder results for experimental products in 12 lb/gal fluids. Base: 20% NaCl / 0.5 lb/bbl XAN-PLEX® D / 0.4-1 lb/bbl NEW-DRILL® PLUS / 2 lb/bbl MIL-PAC® LV (or BIO-PAQ®) / 150 lb/bbl MIL BAR®.

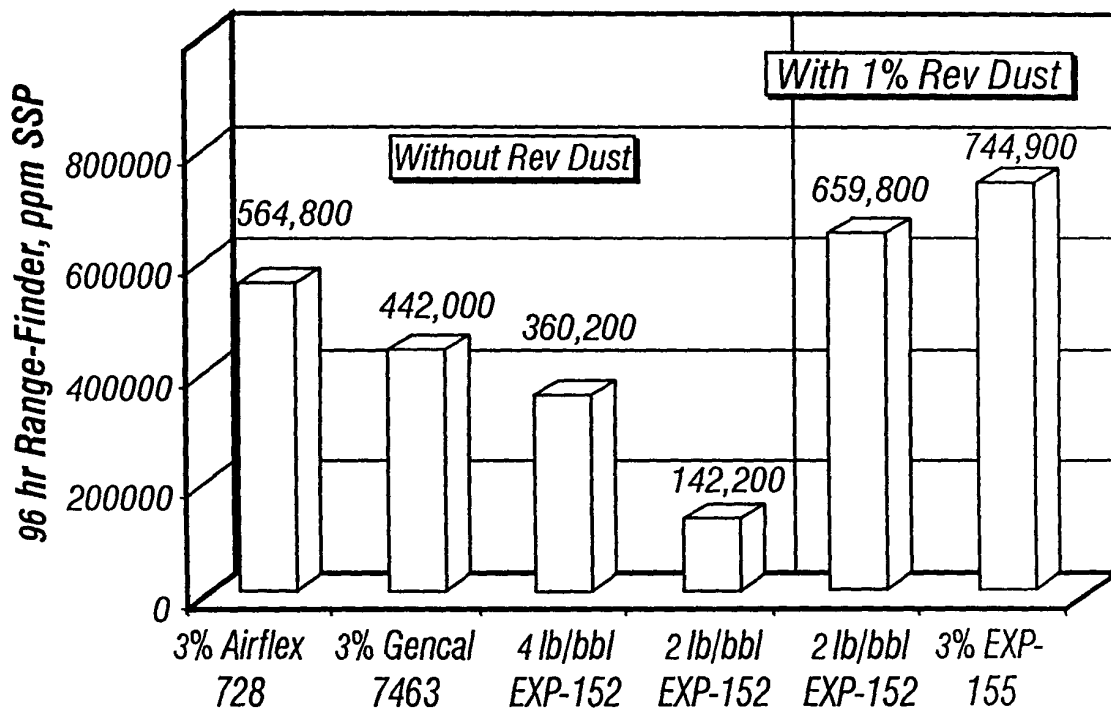


FIG. 9

HTHP fluid loss rate on 50 mD cement disk for the mud containing 3% latex polymer after being hot rolled at 250° F for 16 hours.

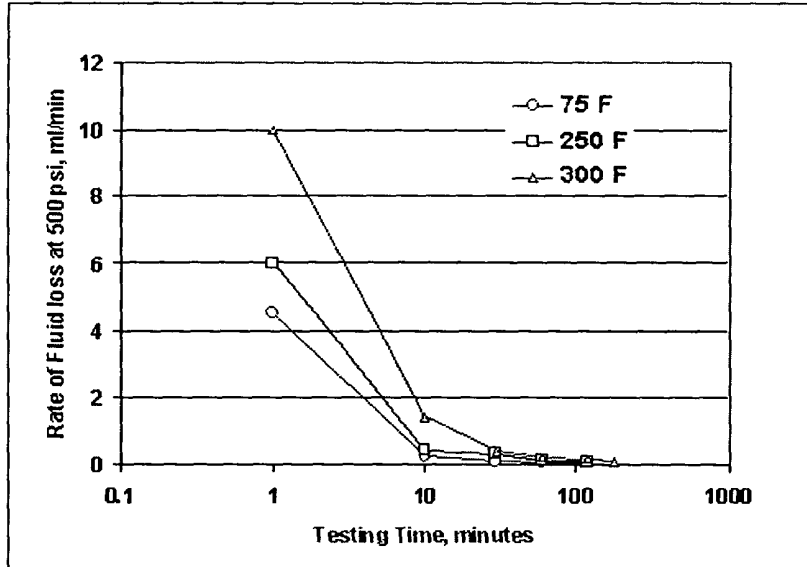


Fig. 10

Internal filter cake formed inside 50 md disk by the mud containing 3% Latex after HTHP testing at 300° F for 4 hours

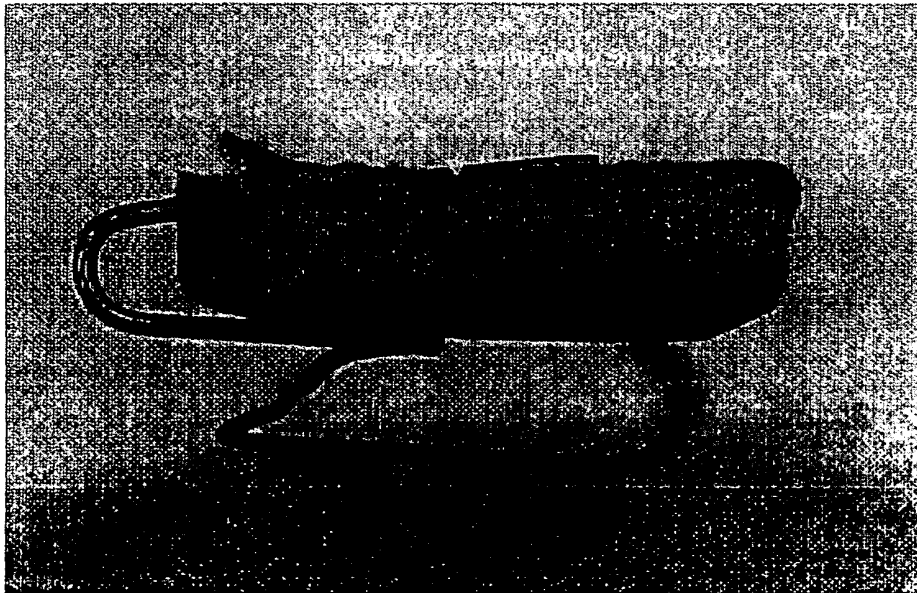


Fig. 11